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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,497	07/18/2001	Shu Yamaguchi		4197

2292 7590 10/19/2005

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

DOUYON, LORNA M.

ART UNIT	PAPER NUMBER
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1751.

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/889,497	Applicant(s) YAMAGUCHI ET AL.	
	Examiner Lorna M. Douyon	Art Unit 1751	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 2, 2005 has been entered.
2. Claims 1-8 and 12-15 are pending.
3. The declaration under 37 CFR 1.132 filed August 2, 2005 is sufficient to overcome the obviousness rejection based upon Van Dijk et al. (WO 94/02573) because Applicants have shown that the detergent granules made by the process of Van Dijk do not meet the classification requirement and properties as those recited.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 5-7 and 12-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakamura et al. (US Patent No. 4,970,017), hereinafter "Nakamura".

Nakamura teaches a process for the production of granular detergent composition having high bulk density wherein a 25.0 kg/hr of potassium dodecylbenzene sulfonate and a 71.4 kg/hr of a powder mixture were introduced into a kneader to obtain a uniformly kneaded mixture in the form of a sheet, the powder mixture comprising 21.8% by weight sodium alpha-olefin sulfonate, 35.0% by weight Type A zeolite, 25.1% by weight sodium silicate powder and 7.3% by weight sodium carbonate, the sheet was pelletized in a pelleter to facilitate disintegration, the pellets thus obtained were fed to a disintegrating machine comprising a screen, and to 97 parts amount of the disintegrated detergent composition obtained was added 3 parts of Type A zeolite to form a coated granular detergent composition having a bulk density of 0.85 g/cc (850 g/l), a 0.2 dust generation amount and a particle size distribution, after a particle size adjustment, such that there is a 1% residue in the 10 mesh (2.0 mm) sieve, 55% residue in the 10-24 mesh (2.00 mm to about 710  $\mu$ m) sieve, 42% residue in the 24-60 mesh (about 710  $\mu$ m to 250  $\mu$ m) sieve, and 2% passing a 60 mesh (250  $\mu$ m) sieve (see Example 1 and Table 1 in col. 9, line 45 to col. 14, line

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9). The silicate has a ratio of  $\text{Na}_2\text{O}$  to  $\text{SiO}_2$  of 1.0 to 3.5 (see col. 4, lines 55-56). The disintegration is preferably carried out using a disintegrating machine provided with a classification mechanism such as a screening or air classification device or by classifying the disintegrated powder particles with a sieve and, thus, powder particles having a narrow particle size distribution range, e.g., having an average particle diameter of 300 to 2000  $\mu\text{m}$  are obtained (see col. 6, lines 16-25). Even though Nakamura does not explicitly disclose the mass base frequency and dissolving rate of each of the classified granules, it would be inherent in the granules of Nakamura to possess the same characteristics as those recited because the same process steps and same ingredients with overlapping proportions have been utilized. Even if the teachings of Nakamura are not sufficient to anticipate the claims, it would have been nonetheless obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the granules of Nakamura to exhibit similar properties because similar process steps having same ingredients with overlapping proportions have been utilized.

7. Claims 2, 4 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Joshi et al. (US Patent No. 4,549,977), hereinafter "Joshi".

Joshi teaches a particulate detergent composition which is prepared by post spraying Neodol 25-7 (a nonionic surfactant) to spray dried base beads to produce a final product consisting of 78% of the base bead, 19.7% of Neodol 25-7 and 2.3% of minor components, the base beads comprising 13% sodium silicate and the resulting product has a bulk density of 0.68 g/cc (680 g/l) and analyze as: 1% on a No. 20 U.S. sieve (850  $\mu\text{m}$ ), 20% on No. 40 (425  $\mu\text{m}$ ),

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52% on No. 60 (250  $\mu\text{m}$ ), 20% on No. 80 (180  $\mu\text{m}$ ), 5% on No. 100 (150  $\mu\text{m}$ ), 2% on No. 200 (75  $\mu\text{m}$ ), and 0% through No. 200 (see Example 1 in col. 11, line 53 to col. 12, line 44). Even though Joshi does not explicitly disclose the mass base frequency and dissolving rate of each of the classified particulates, it would be inherent in the particulates of Joshi to possess the same characteristics as those recited because the same process steps and same ingredients with overlapping proportions have been utilized. Even if the teachings of Joshi are not sufficient to anticipate the claims, it would have been nonetheless obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the particulates of Joshi to exhibit similar properties because similar process steps having same ingredients with overlapping proportions have been utilized.

8. Claims 5-8, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joshi as applied to the above claims.

Joshi teaches the features as described above. In addition, Joshi teaches that although nonionic detergents are the preferred synthetic organic detergent, mixtures of nonionic and anionic detergents are sometimes even more preferred (see col. 5, lines 36-38). Additional examples of nonionic detergent include the condensation of ethylene oxide with a hydrophobic base formed by condensing propylene oxide with propylene glycol (see col. 5, lines 61-66). The anionic detergents are preferably employed as their sodium salts although potassium salts may also be utilized (see col. 6, lines 36-40). The built detergent composition particles will usually contain from 30 to 80% of builder and 2 to 35% or 40% of synthetic organic detergent (see col. 8, lines 3-11). The builders include silicates having a  $\text{Na}_2\text{O}:\text{SiO}_2$  ratio from 1:1.6 to about 1:3.4

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(see col. 7, lines 45-48). Other builders include carbonates and ion-exchanging zeolites (see col. 7, lines 14-25), wherein the zeolites read on the crystalline silicate of claims 14 and 15. Joshi, however, fails to specifically disclose the recited amount of anionic surfactant with potassium counterions, the recited total sum of sodium carbonate and alkali metal silicate.

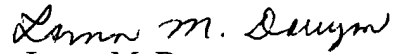
It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of the potassium salts of anionic surfactant, sodium carbonate and sodium silicate through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Lorna M. Douyon  
Primary Examiner  
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